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(71) Applicant (for all designated States except US): **STICHT-  
ING VOOR DE TECHNISCHE WETENSCHAPPEN**  
[NL/NL]; Van Vollenhovenlaan 661, NL-3527 JP Utrecht  
(NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DE JONG, Nicolaas**  
[NL/NL]; Duindoorn 71, NL-2923 EC Krimpen aan de Ijs-  
sel (NL). **BOUAKAZ, Ayache** [DZ/NL]; Schieweg 210D,  
NL-3038 BN Rotterdam (NL).

(74) Agent: **CHARIG, Raymond**; Eric Potter Clarkson, Park  
View House, 58 The Ropewalk, Nottingham NG1 5DD  
(GB).

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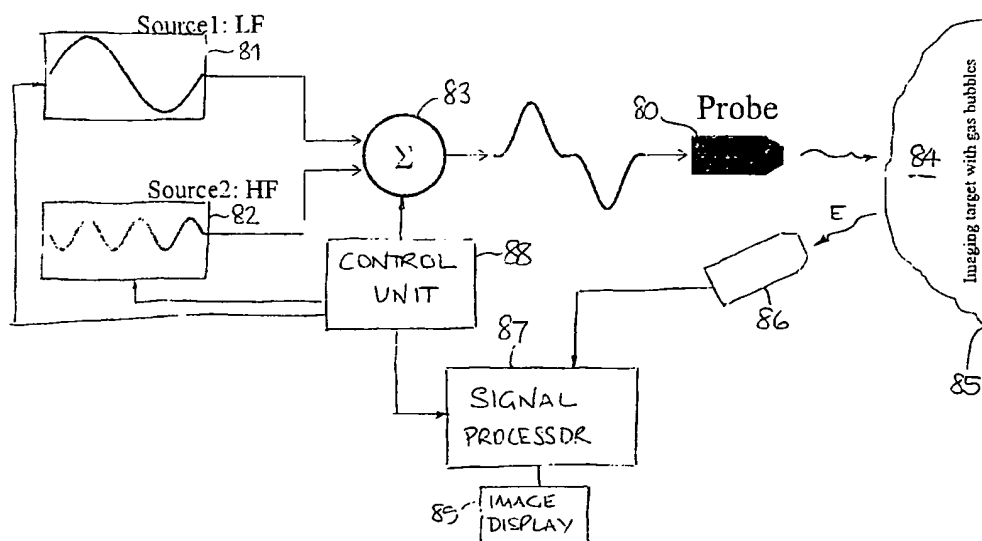
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(54) Title: **CONTRAST DUAL FREQUENCY IMAGING**



(57) Abstract: A method and apparatus for ultrasound imaging which uses dual frequency excitation of a target. The target is simultaneously irradiated with a relatively low frequency ultrasound conditioning signal and a relatively high frequency ultrasound detection signal. The conditioning signal modulates a physical property (e.g. size) of first structures (e.g. gas bubbles) within the target, which modulation causes changes in the echo signal response of the first structures to the detection signal. A signal processor is adapted to process the received echo signals to detect the presence of the first structures by virtue of a first magnitude of detection signal echo arising from periods when the conditioning signal is in a first phase and a second, different, magnitude of detection signal echo arising from periods when the conditioning signal is in a second phase.